Time before present (Mya)
100
80
60
40
20
0
Apis_mellifera
Euffriesea_ornata
Euglossa_intersecta
Bombus_terrestris
Lidotrigona_Madagascar_spB1
Xylocopa_Copoxyla_iris
Xylocopa_Schonnherria_micans
Xylocopa_Diaxylocopa_truxali
Xylocopa_Notoxylocopa_sp
Xylocopa_Nyctomelitta_tranquibarica
Xylocopa_Proxylocopa_olivieri
Xylocopa_Pentxylocopa_erythrina
Xylocopa_Neoxylocopa_griseiceans
Xylocopa_Neoxylocopa_sp
Xylocopa_Stenoxylocopa_sp1
Xylocopa_Neoxylocopa_frontalis
Xylocopa_Gnathoxylocopa_sicheli
Xylocopa_Lestis_bombylans
Xylocopa_Lestis_aeratus
Xylocopa_Xylocopoides_sp
Xylocopa_Xylocopa_violacea
Xylocopa_Xylocopa_sulcatipes
Xylocopa_Xylocopa_albifrons
Xylocopa_Apoxylocopa_lugubris
Xylocopa_Biluna_auripennis
Xylocopa_Mesichtrichia_spA1
Xylocopa_Koptortosoma_flavicollis
Xylocopa_Xylocopa_pubescens
Xylocopa_Koptortosoma_spSA1
Xylocopa_Koptortosoma_watmoughi
Xylocopa_Koptotorsoma_caffra
Xylocopa_Afroxylocopa_nigrifa
Xylocopa_Xenoxylocopa_inconstans
Xylocopa_Zonohirsuta_sp
Xylocopa_Liefinckiella_smithii
Xylocopa_Platynopoda_spB24
Xylocopa_Alloxylocopa_sp1
Xylocopa_Hopkoxylocopa_spT6
Xylocopa_Koptortosoma_sp_India
Xylocopa_Koptortosoma_dimidiata
Xylocopa_Koptortosoma_leucocephala
Xylocopa_Koptortosoma_cf_confusa1
Xylocopa_Koptortosoma_nobilis_tricolor
Xylocopa_Koptortosoma_provida_spRB08
Xylocopa_Koptortosoma_disconata
Xylocopa_Koptotorsoma_lieftinckii
Xylocopa_Koptortosoma_parvula
Xylocopa_Koptortosoma_aruana
Xylocopa_Koptortosoma_waterhousei
Xylocopa_Koptortosoma_nigroclypeata
Manuella_gayi
Manuellia_postica
Manuellia_gayatina
Macrogalea_mombasae_Kenya
Macrogalea_mombasae_Tanz
Macrogalea_candida_Tanz
Macrogalea_magenge
Macrogalea_candida_Kenya
Macrogalea_mozambique_sp
Macrogalea_Malawi_sp
Macrogalea_zanzibarica
Macrogalea_candida
Macrogalea_ellioti
Macrogalea_antanosy
Macrogalea_sciaevolae
Macrogalea_Ramena_sp
Macrogalea_infernalis
Macrogalea_mazina
Macrogalea_berentyensis
Exoneuridia_hakkariensis
Hasinamelissa_italoensis
Hasinamelissa_minuta
Hasinamelissa_seyrigi
Hasinamelissa_MorondavaA
Hasinamelissa_keiseri
Hasinamelissa_MorondavaB
Hasinamelissa_R43H
Exoneurella_SADEN_4
Exoneurella_tridentata
Exoneurella_eremophila
Exoneurella_setosa
Exoneurella_lawsoni
Brevineura_ploratula
Brevineura_elongata
Brevineura_xanthocdypeata
Exoneura_Cobboboonee_sp1
Exoneura_angophorae
Exoneura_Coobboboonee_sp2
Exoneura_bicolor
Exoneura_robusta
Exoneura_nigrescens
Exoneura_Adelaide_sp
Inquilina_schwarzi
Inquilina_adeladei
Inquilina_holsworthi
Inquilina_chenoweth
Inquilina_wcisler
Inquilina_tiemeyi
Inquilina_excavata
Inquilina_dawsoni
Compsomelissa_borneri
Halterapis_nigrinervis_R
Halterapis_nigrinervis_B
Allodapula_acutigera
Allodapula_dichroa
Allodapula_zaxanthe
Allodapula_empeyi
Allodapula_melanopus
Allodape_exoloma
Allodape_skaifeiorum
Allodape_friesei
Braunsapis_trochanterata
Braunsapis_MysoreHost
Braunsapis_Malaysia_host_sp2
Braunsapis_pictarsis
Braunsapis_MysoreParasite
Braunsapis_Malaysia_para_sp2
Braunsapis_KoChang_sp
Braunsapis_Pilbara_sp
Braunsapis_nr_hyalina
Braunsapis_unicolor
Braunsapis_falcata
Braunsapis_hirsuta
Braunsapis_leptozonia
Braunsapis_madecassa
Braunsapis_Kenya_sp
Braunsapis_foveata
Braunsapis_elizabethana
Braunsapis_paradoxa_1
Braunsapis_paradoxa
Nasutapis_sp
Braunsapis_vitrea
Braunsapis_albipennis
Braunsapis_otavica
Braunsapis_Nasut_host
Braunsapis_boxysicui
Braunsapis_StMarie_sp2
Braunsapis_Toliara_sp
Braunsapis_Taolagnaro_sp
Pithitis_smaragdula
Pithitis_binghami
Pithitis_unimaculata
Protopithitis_Kenya_sp282
Pithitis_tarsata
Pithitis_citriphila
Pithitis_fasciata
Pithitis_Kenya_sp
Pithitis_nasalis
Pithitis_wairi
Ceratinula_cockerelli
Ceratinula_brevicaps
Ceratinula_rectangulifera
Ceratinula_Paraguay_sp
Ceratinula_aurivirdis
Calloceratina_Panama_sp215
Calloceratina_Panama_sp258
Calloceratina_mexicana
Calloceratina_Blue_sp
Zadontomerus_nanula
Zadontomerus_Belize_spD
Zadontomerus_acanthe
Zadontomerus_Belize_spC
Zadontomerus_cyaniventris
Zadontomerus_dupla
Zadontomerus_strenua
Zadontomerus_calcarata
Zadontomerus_floridana
Ceratina_New_subgenus
Liceratina_flavolateralis
Ceratinidia_nigrolateralis
Ceratinidia_cognata
Ceratinidia_bryanti
Ceratinidia_Laos_sp302
Ceratinidia_accusator
Ceratinidia_Thailand_sp314
Ceratinidia_flavipes
Ceratinidia_Thailand_sp312
Ceratinidia_okinawana
Ceratinidia_Iriomote_sp305
Ceratinidia_papuana
Ceratinidia_japonica
Ceratinidia_Japan_sp308
Ceratinidia_moderata
Ceratinidia_hieroglyphica
Ceratinidia_Thailand_sp313
Ceratinidia_bowringi
Neoceratina_australensis
Neoceratina_propinqua
Neoceratina_bispinosa
Neoceratina_Samoa_sp
Neoceratina_dentipes
Neoceratina_Solomons_sp
Neoceratina_satoi
Copoceratina_minuta
Ceratina_minutula
Ceratina_speculifrons
Megaceratina_sculpturata
Ceratina_subquadrata
Ceratina_braunsi
Ceratina_rhodura
Ceratina_aloes
Ceratina_perpolita
Malgatina_azurea
Euceratina_dallatorreana
Euceratina_nr_ferghanica_270
Euceratina_tibialis
Euceratina_chalcites
Euceratina_chrysomalla
Euceratina_chalybea
Euceratina_nr_mocsaryi_287
Euceratina_nr_mocsaryi_259
Euceratina_nr_mocsaryi_272
Euceratina_nr_cyanea_288
Euceratina_nr_cyanea_285
Euceratina_mandibularis
Hirashima_Malagasy_sp2
Hirashima_lativentris
Hirashima_Malagasy_sp1
Hirashima_Zambia_sp2
Hirashima_Zambia_sp1
Hirashima_S_Africa_sp2
Hirashima_S_Africa_sp1
Simioceratina_tanganyicensis
Simioceratina_lunata
Simioceratina_moerenhouti
Ctenoceratina_pencillata
Ctenoceratina_rufigastra
Ctenoceratina_pencillata
Ctenoceratina_ericia
Ctenoceratina_penicilligera
Ctenoceratina_malinciae
Ctenoceratina_lineola
Ctenoceratina_bilobata
Ctenoceratina_Zambia_sp